

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/711,945		10/14/2004	Giles Humpston	TESSERA 3.0-395	5944	
38091	7590	11/20/2006		EXAMINER		
TESSERA			YAM, STEPHEN K			
LERNER DA	VID et a	ıl.				
600 SOUTH	AVENUI	E WEST	ART UNIT	PAPER NUMBER		
WESTFIELD), NJ 07	7090	2878			
				DATE MAILED: 11/20/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	}{				
		10/711,945	HUMPSTON ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Stephen Yam	2878					
	The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address	••				
Period fo	· ·		O) OD THEETY (OO) DA	\ <u>'</u> 0				
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DOWNS OF THE MAILING DO	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communic D (35 U.S.C. § 133).					
Status								
1) 🛛	Responsive to communication(s) filed on <u>18 A</u>	ugust 2006.						
2a)□	This action is FINAL . 2b) This action is non-final.							
3)								
	closed in accordance with the practice under \boldsymbol{E}	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.					
Dispositi	on of Claims							
4)⊠	4) Claim(s) 1-44 is/are pending in the application.							
	4a) Of the above claim(s) <u>1-28,33-40 and 42</u> is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
•	Claim(s) <u>29-31 and 41</u> is/are rejected.							
	Claim(s) 32,43 and 44 is/are objected to.							
8)[_]	Claim(s) are subject to restriction and/o	r election requirement.						
Applicati	on Papers		·					
	The specification is objected to by the Examine							
10)⊠ The drawing(s) filed on <u>14 October 2004</u> is/are: a)⊠ accepted or b) \square objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
		Raininer. Note the attached Office	Action of formal 10 10	.				
-	under 35 U.S.C. § 119	•						
-	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)-(d) or (f).					
a)	a) All b) Some * c) None of:							
	 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 							
	2. Certified copies of the priority documents have been received in Application No3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachmer	nt(s)		•					
	ce of References Cited (PTO-892)	4) 🔲 Interview Summary Paper No(s)/Mail D						
3) 🛛 Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal						
Paper No(s)/Mail Date <u>20060103</u> , <u>20060822</u> . 6) Other:								

Application/Control Number: 10/711,945 Page 2

Art Unit: 2878

DETAILED ACTION

Election/Restrictions

1. Claims 1-28, 33-40, and 42 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 18, 2006.

2. Applicant's election with traverse of Group II in the reply filed on August 18, 2006 is acknowledged. The traversal is on the ground(s) that dependent claims 25-28 in Group I contain the distinct features of Group II and should be included in the election. This is not found persuasive because Group I is directed an invention having a front cover and a seal and other elements recited in Claims 1 and 16 and is deemed by Applicant as patentable on those merits alone, and not requiring a reflector, emitter and detector, and an analyte space for patentability. Although Claims 25-28 contain the features also described in Group II, the claims in essence are directed to a device with a front cover and a seal which Applicant has deemed patentable by including them by the claimed structure of Claim 16.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Page 3

Application/Control Number: 10/711,945

Art Unit: 2878

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 29 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elkind et al. US Patent No. 6,326,612 in view of Schneider et al. US Patent No. 6,704,470.

Regarding Claims 29 and 41, Elkind et al. teach (see Fig. 1-2) a sensor comprising a reflector (44, 46, 72) having a proximal surface (facing down) and electrically conductive features (44, 46), at least a portion (72) of said proximal surface being adapted to reflect radiation in a predetermined wavelength band (emission wavelength of light source (68)), an element (38) including an emitter (68) and a detector (74) mounted to said reflector (see Fig. 1) so that there is an analyte space (56, 58) between said microelectronic element and said proximal surface of said reflector (on the optical path) open for passage of an analyte therethrough (see Col. 5, lines 23-30), said emitter being arranged to direct radiation in said band through said analyte space (see Fig. 2) to said reflector, said element being electrically connected to said electrically conductive features of said reflector (since the display (44) and LED (46) are controlled by the coupling between the sensing device (10) and the host analytical unit (30) and thus are electrically connected to those components- see also Col. 4, lines 54-65). Elkind et al. do not teach the element as a microelectronic element or a semiconductor chip, with the emitter arranged so that said radiation will be reflected by said reflector back through said analyte space to said detector. Schneider et al. teach (see Fig. 5) a similar sensor with a reflector (24) and a microelectronic element/semiconductor chip (10, 12, 23) (see Col. 5, lines 22-29, 54-65) including an emitter (23) and a detector (12) mounted to the reflector, the emitter directing radiation through an analyte space (25) (see Col. 8, lines 3-9) so that so that said radiation will be reflected by said reflector to said detector (see Fig. 5 and Col. 7, lines 29-36). It would have

Application/Control Number: 10/711,945

Art Unit: 2878

been obvious to one of ordinary skill in the art at the time the invention was made to provide the sensor with a microelectronic element with the emitter arranged so that said radiation will be reflected by said reflector back through said analyte space to said detector, as taught by Schneider et al., in the device of Elkind et al., to provide integration into a single unit for reduced size, as taught by Schneider et al. (see Col. 7, lines 61-65) and improved sensitivity of the sensor due to an increased/doubled effect by the analyte space on the emitted light.

5. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elkind et al. in view of Schneider et al., further in view of Carr et al. US Patent No. 6,045,756.

Regarding Claim 30, Elkind et al. in view of Schneider et al. teach the device in Claim 29, according to the appropriate paragraph above. Elkind et al. also teach (see Fig. 2) said reflector having a distal surface (facing up) facing away from said microelectronic element. Elkind et al. do not teach said electrically conductive features including terminals exposed at said distal surface. Carr et al. teach (see Fig. 3-7) a similar device with multiple external surfaces of the device having exposed terminals (105, 107, 109). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide electrically conductive features including terminals exposed at the distal surface as taught by Carr et al., in the device of Elkind et al. in view of Schneider et al., to provide multiple contact points for improved coupling to an external device as taught by Carr et al. (see Col. 7 and Col. 6, lines 31-35 and Col. 6, line 58 to Col. 7, line 4).

Regarding Claim 31, Elkind et al. teach the reflector having horizontal dimensions substantially equal to or less than the horizontal dimensions of said element (see Fig. 2).

Application/Control Number: 10/711,945 Page 5

Art Unit: 2878

Allowable Subject Matter

6. Claims 32, 43, and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Regarding Claims 32, 43, and 44, the invention as claimed, specifically in combination with the reflector as a circuit panel extending outwardly beyond said microelectronic element/chip in at least one horizontal direction, with electrically conductive traces on said circuit panel, is not disclosed or made obvious by the prior art of record.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Welland et al. US 6,972,423 teach a similar device with an emitter, detector, and reflector.

Starikov et al. US 6,881,979 teach a microelectronic element/semiconductor chip with an emitter and a detector for detecting an analyte.

Art Unit: 2878

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Yam whose telephone number is (571)272-2449. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571)272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.